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### RECORD OF REVISIONS

Rev	Date	Description	POC	OIC
0	8/16/04	Initial issue.	Kelly Bingham, <i>FWO-DECS</i>	Gurinder Grewal, <i>FWO-DO</i>

Responsible Engineering Standards POC and Committee  
for upkeep, interpretation, and variance issues

<b>WFP 5-01</b>	<a href="#"><u>Welding POC/Committee</u></a>
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## **PQR 5-01 WELDING PROCEDURE QUALIFICATION RECORDS**

### **1.0 PURPOSE AND SCOPE**

- A. This section establishes the basis for application of Welding Procedure Qualification Records (PQR) in support of Welding Procedure Specifications (WPS) and Welding Technique Sheets (WTS) under the LANL Welding Program.
- B. The scope of this section is the Welding Procedure Qualification Records developed in accordance with the GWS 1-04, *Welding Procedure Qualification Test and Records*, of this program. Legacy PQRs developed by support services organizations at LANL are also included within the applicability of this procedure when used within the LANL Welding Program.

### **2.0 REFERENCES**

- 1. PQR 5-02, *Welding Procedure Qualification Records Index*
- 2. WPS 3-02, *Welding Procedure Specification Index*

### **3.0 ACRONYMS AND DEFINITIONS**

None

### **4.0 GENERAL**

- A. Welding PQRs (reference PQR 5-02, *Welding Procedure Qualification Records Index*) have been prepared and certified under the LANL Welding Program in accordance with GWS 1-04, *Welding Procedure Qualification Tests and Records*. These records are provided in support of Welding Procedure Specifications (reference WPS 3-02, *Welding Procedure Specification Index*).
- B. Selected legacy PQRs prepared and qualified by contractor organizations in support of LANL work have been included in PQR 5-02, *Welding Procedure Qualification Records Index*. In compliance with applicable code requirements, these qualification records are provided to support the development of LANL Welding Procedure Specifications and Welding Technique Sheets.
- C. When issued, demonstration records for use of Standard Welding Procedure Specifications / Welding Technique Sheets will be identified for use in PQR 5-02, *Welding Procedure Qualification Records Index*.
- D. Welding procedure qualification tests are conducted to establish properties of the material and weldment, and not the skill of the individual(s) performing the welding. For the purposes of procedure qualification, it is presupposed and essential that the welder or welding operator performing the test is a skilled individual or crafts person.

## **5.0 PROCEDURE**

- A. Qualified and certified Welding PQRs, (reference PQR 5-02, *Welding Procedure Qualification Records Index*) shall be applied in support of Welding Procedure Specifications and Welding Technique Sheets developed for use under the LANL Welding Program.
- B. Special consideration shall be given when governing codes or standards require notch toughness tests. The notch-toughness variables do not apply unless referenced by engineering specification or applicable codes or standards.
- C. New welding procedures are developed when an “essential variable” as defined in ASME Section IX or AWS D1.1 (base metal, pre- or post-weld heat treatment, size, etc.) is introduced or an engineering specification necessitates a procedure qualification.
- D. When permitted by the reference code or standard, the LANL WPA may accept evidence of previous qualification of specific procedures to be used on work being performed under the LANL Welding Program. All required information shall be recorded in accordance with PQR 5-02, *Welding Procedure Qualification Records Index*.

## **6.0 ATTACHMENTS**

None